I. Attendance & Announcements
Next time B63B
Klamath 1st Anatomy Lab Trip! Directions ✓.
NB: Shoes + pants & no photos. Q?

II. Anatomy of Squat-Push-Pull Exercises
A. Squat
   1. Multi-joint: Front squat/squat, leg press, lunge
   2. Single-joint/isolation: Leg extension, leg curl
B. Push
   1. Bench press
   2. Military press
C. Pull
   1. Bent-over row
   2. Rowing variations

SOURCES: VPL, Francis & Martin, McMinn & Hutchings, Panksy & http://www.fitworkz.com
http://map.uoregon.edu/
63 SRC to B63B KLA
Squat!

Lower Body!

COG to periphery!
Front Squat

- Hip
- Thigh front, back, inside
- Lower back
- Gluteal group
- Quadriceps
- Hamstrings
- Adductors
- Erector spinae
Sprinters rely upon explosive hip & thigh strength emanating from the Center of Gravity!
IT Band Syndrome?
Piriformis
L. pear-shaped

Sciatic n. runs beneath! Sciatica?
Deeper Gluteal Muscles Look Like Pizza Slices!!
Superficial to Deep: *Maximus, Medius, Minimus!*


L thigh anterior

Quadriceps

1. Rectus femoris
2. Vastus intermedius
3. Vastus lateralis
4. Vastus medialis

NB: worked last 10-15⁰ of knee extension
Vastus medialis
L. great, vast, huge medial extensor!

Gracilis
L. slender adductor

Sartorius
L. tailor

Vastus medialis
L. great, vast, huge medial extensor!

Rectus femoris
L. straight thigh muscle, also extensor

Patella ≡ kneecap
L. shallow dish/pan, sesamoid or island bone

L thigh anterior & medial

NB: torqued laterally
Hamstring Group

1. Biceps femoris (long)
2. Biceps femoris (short)
3. Semimembranosus
4. Semitendinosus
R lower back & hip quadrant
R lower back & hip quadrant

Latissimus dorsi

Erector spinae beneath fascia

Gluteus maximus

External oblique
Leg Press

- Lower back

Muscles:

- Hip
- Thigh front
- Thigh back
- Thigh inside

Other:

- Gluteal group
- Quadriceps
- Hamstrings
- Adductors
Lunge
Avoid Overstriding!
Leg Extension

Front of thigh = quadriceps
Leg Curl

- Posterior thigh = hamstring group
- Calf = gastrocnemius (minor involvement)
Push!
Upper Body!
Multi-Joint Action!
Agonistic!
Bench Press
Chest
Shoulder front
Arm back
Pectoral group
Anterior deltoid
Triceps brachii
Q. Wide grip vs. elbows near side?
R chest anterior
R chest anterior
L arm lateral

- Pectoralis major
- Deltoid
- Triceps brachii
- Biceps brachii
- Brachialis
Military Press
Shoulder – front & middle
Arm – back
Neck

Anterior & Middle Deltoid
Supraspinatus
Triceps Brachii
Anterior neck muscles
Sternocleidomastoid
Posterior neck muscles
Upper trapezius
Levator scapula
Military Press Muscle Activation
Pull!

Upper Body!

Multi-Joint Action!

Antagonistic!
NB: Engages muscles exactly inverse to bench press. Upper back, back of shoulder, front of arm, back of forearm. Great for supersetting!
Seated Row! Wow Possibilities!?

NB: Engages muscles inverse to bench press with a bit more lower back! Still good for supersetting! Variable grip and pull?
Latissimus dorsi grip vs wider rhomboid, mid-trapezius grip. Posterior deltoid? Pronated vs supinated?

SOURCE: www.fitworkz.com